

# RECLAMATION

*Managing Water in the West*

**Draft Environmental Assessment**

## **Warren Act Contract for Kern-Tulare Water District and Lindsay-Strathmore Irrigation District**

**EA-12-069**



**U.S. Department of the Interior  
Bureau of Reclamation  
Mid Pacific Region  
South-Central California Area Office  
Fresno, California**

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## **Mission Statements**

The mission of the Department of the Interior is to protect and provide access to our Nation's natural and cultural heritage and honor our trust responsibilities to Indian Tribes and our commitments to island communities.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

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# Section 1 Introduction

## 1.1 Background

Kern-Tulare Water District (KTWD) and Lindsay-Strathmore Irrigation District (LSID) (collectively the Districts) have Central Valley Project (CVP) Friant Division repayment contracts with the Bureau of Reclamation (Reclamation).

The Warren Act (Act of February 21, 1911; Chapter 141, 36 Stat. 925) authorizes Reclamation to enter into contracts to impound, store, or convey non-project water when excess capacity is available in Federal facilities.

Reclamation and the Districts currently have Warren Act Contracts in place for the conveyance of up to 10,000 acre-feet (af) per year of each District's non-CVP water during contract years 2009 through 2013 (March 1, 2009 – February 28, 2014). The execution of those contracts was evaluated in Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) number 08-086; those documents are incorporated by reference.

Due to regulatory, contractual, and policy changes, the Districts may now store, convey, or divert non-CVP water according to Article 18 of their repayment contracts, with Reclamation's approval but without the need for separate Warren Act contracts. Additionally, since issuance of the 5-year Warren Act contract referenced in EA/FONSI 08-086, Reclamation's Mid-Pacific Region has been given authority to approve Warren Act requests exceeding 10,000 acre-feet in a single contract year.

Pursuant to the terms of their repayment contracts, the Districts request Reclamation's approval to each store, convey, divert, or exchange up to 30,000 acre-feet (af) per year of non-CVP water in Friant Division and Cross-Valley Unit facilities.

## 1.2 Need for the Proposed Action

The Districts have a need to better regulate their varied water resources and provide for overall water management flexibility. To accomplish this, the Districts need Reclamation's approval to: store, convey, divert or exchange non-CVP water in Friant Division and Cross-Valley Unit facilities; or exchange non-CVP water for CVP water.

## 1.3 Relevant Legal and Statutory Authorities

Several Federal laws, permits, licenses and policy requirements have directed, limited or guided the National Environmental Policy Act analysis and decision-making process of this EA and include the following as amended, updated, and/or superseded (all of which are incorporated by reference):

### **1.3.1 Warren Act**

The Warren Act (Act of February 21, 1911; Chapter 141, 36 Stat. 925) authorizes Reclamation to enter into contracts to impound, store, and/or convey non-project water when excess capacity is available in federal facilities.

### **1.3.2 Reclamation Project Act**

Section 14 of the Reclamation Project Act of 1939 (53 Stat. 1197; 43 U.S.C., subsection 389) authorizes the Secretary, for the purpose of orderly and economical construction or operation and maintenance of any project, to enter into such contracts for exchange or replacement of water, water rights, or electric energy or for the adjustment of water rights, as in his judgment are necessary and in the interests of the United States and the project.

### **1.3.3 Central Valley Project Improvement Act**

The Central Valley Project Improvement Act of 1992, Title 34 (of Public Law 102-575), Section 3408(c), authorizes the Secretary of the Interior to enter into contracts pursuant to Reclamation law and this title with any Federal agency, California water user or water agency, State agency, or private nonprofit organization for the exchange, impoundment, storage, carriage, and delivery of CVP and non-CVP water for domestic, municipal, industrial, fish and wildlife, and any other beneficial purpose, except that nothing in this subsection shall be deemed to supersede the provisions of section 103 of Public Law 99-546 (100 Stat. 3051).

Reclamation completed the Final Programmatic Environmental Impact Statement (PEIS) for the Central Valley Project Improvement Act (CVPIA) in October 1999 that analyzed alternatives and implementation of the CVPIA. The Record of Decision (ROD) was signed in January 9, 2001. The PEIS and ROD are incorporated in this document by reference.

### **1.3.4 Water Quality Standards**

Water quality and monitoring requirements are established by Reclamation to protect water quality in the Friant-Kern Canal (FKC) and Madera Canal by ensuring that conveyance of non-CVP water does not negatively impact water quality for downstream water users. The current standards are contained in Appendix A: *Policy for Accepting Non-Project Water into the Friant-Kern and Madera Canals: Water Quality Monitoring Requirements*. These standards may be as amended, updated, and/or superseded by Reclamation in the future and the then-existing water quality standards shall apply to this Action.

## **1.4 Scope**

This EA has been prepared to examine the impacts on environmental resources as a result of storing, conveying, or diverting the Districts' non-CVP water in Friant Division and Cross Valley Unit facilities; or exchanging non-CVP water for CVP water.

The geographic scope of the EA (Figure 2-1, Figure 2-2) would be: the service areas of the Districts; the service areas of possible intermediaries and partners; Friant Division and Cross Valley Unit facilities; and non-Federal facilities including the California Aqueduct and the Cross Valley Canal (CVC).

The temporal scope of the EA would be for up to 30 years, from the 2013 through 2042 Contract Years (March 1, 2013 - February 28, 2043). Reclamation would review the EA at five-year intervals, and supplement if Reclamation determines that there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts.

## **1.5 Resources of Potential Concern**

This EA will analyze the affected environment of the Proposed Action and No Action Alternative in order to determine the potential direct and indirect impacts and cumulative effects to the following resources:

- Water Resources
- Land Use
- Biological Resources
- Socioeconomic Resources

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## **Section 2 Alternatives Including the Proposed Action**

This EA considers two possible actions: the No Action Alternative and the Proposed Action. The No Action Alternative reflects future conditions without the Proposed Action and serves as a basis of comparison for determining potential effects to the human environment.

### **2.1 No Action Alternative**

Under the No Action Alternative, Reclamation would neither approve the storage, conveyance, or diversion of non-CVP water in Federal facilities according to the Warren Act; nor approve the exchange of the Districts' non-CVP water for CVP water as proposed below. Reclamation would continue to deliver CVP water in accordance with the terms and conditions of the Districts' CVP repayment and water service contracts. The existing Warren Act Contracts would remain in place, allowing storage, conveyance, or diversion of up to 10,000 af/year of each District's non-CVP water when excess capacity exists, through February 28, 2014.

### **2.2 Proposed Action**

Reclamation would approve storage, conveyance, and/or diversion of non-CVP water in Federal facilities when excess capacity exists, according to the Article 18 of the Districts' repayment contracts. Reclamation would also approve exchange of the Districts' non-CVP water for CVP water, in order to facilitate delivery. Approvals would be for varying lengths of time between the 2013 through 2042 Contract Years (March 1, 2013 - February 28, 2043).

#### **2.2.1 Lindsay-Strathmore Irrigation District**

Reclamation proposes to approve storage, conveyance, and/or diversion of up to 30,000 af/year of LSID's non-CVP water in Federal facilities, when excess capacity exists, according to Article 18 of LSID's Friant Division repayment contract. LSID's non-CVP water originates in the Kaweah River, passes through Bravo Lake, and enters the Upper Wutchumna Ditch. Before introduction into the FKC, the Wutchumna water must be tested at specific points (Table 3-2) to confirm that it meets Reclamation's water quality requirements in effect at the time of conveyance; the current standards can be found in Appendix A. The water would be pumped from the Wutchumna Ditch into the FKC, and ultimately into LSID's distribution system and service area (Figure 2-1).

Any amount of Wutchumna water left in storage in the FKC would be allowed to "float" for up to 30 days, when Reclamation determines that excess capacity exists; LSID could later withdraw their stored Wutchumna water from the FKC as needed.

#### **2.2.2 Kern-Tulare Water District**

Reclamation proposes to approve storage, conveyance, and/or diversion of up to 30,000 af/yr of KTWD's non-CVP water in Federal facilities when excess capacity exists, per the terms of KTWD's partial assignment of the Southern San Joaquin Municipal Utility District's Friant Division repayment contract. KTWD's non-CVP supplies include Kern River and State Water

Project (SWP) water. Before introduction into the FKC, KTWD’s non-CVP water must be tested at specific points (Table 3-3) to confirm that it meets Reclamation’s water quality requirements in effect at the time of conveyance; the current standards can be found in Appendix A. The two sources of non-CVP water would be introduced into the FKC from: the CVC through existing siphons; the CVC through the CVC/FKC Intertie; or the Lerdo Canal via North Kern Water Storage District's distribution system. Once introduced into the FKC, the non-CVP water could be stored, delivered directly to KTWD's service area, or delivered to KTWD through an intercept exchange for CVP water from the FKC. Physical delivery of the water to KTWD would require pumping over three check structures: the Shafter Check, the Poso Creek Check, and the Lake Woollomes Check. Alternatively, an intercept exchange can be made with Arvin-Edison Water Storage District (AEWSD) which requires no additional lifts. When an intercept exchange with AEWSD is not available, the water could be pumped over the Shafter Check and exchanged with Shafter-Wasco Irrigation District. Possible intermediaries needed to facilitate these exchanges may include the North Kern Water Storage District and Kern County Water Agency (KCWA) Improvement District No. 4 (ID#4) (Figure 2-2).

Any amount of KTWD’s non-CVP water left in storage in the FKC would be allowed to "float" for the duration of the approval, when Reclamation determines that excess capacity exists; KTWD could later withdraw their stored non-CVP water from the FKC as needed.

**2.2.3 Environmental Commitments**

Reclamation and the Districts must implement the following environmental protection measures to reduce environmental consequences associated with the Proposed Action (Table 2-1). Environmental consequences for resource areas assume the measures specified would be fully implemented. Copies of all reports must be submitted to Reclamation.

**Table 2-1 Environmental Protection Measures and Commitments**

<b>Resource Concern</b>	<b>Protection Measure</b>
Biological & Land	The non-Project water involved in these actions must not be used to cultivate native or untilled land (fallow for three years or more).
Land	The Proposed Action must not require new construction or modification of existing facilities.
Land & Water	The Proposed Action must not increase or decrease water supplies that would result in development.
Water Quality	The Districts must comply with all provisions of Reclamation’s water quality and monitoring requirements for the FKC that are in effect at the time of pump-in. The current (2008) Water Quality Monitoring Plan for the Proposed Action is attached as Appendix A.
Water Quality	LSID must additionally implement the monitoring plan specified in Table 3-2. The table may be amended if necessary to meet Reclamation’s future water quality and monitoring requirements.
Water Quality	KTWD must additionally implement the monitoring plan specified in Table 3-3. The table may be amended if necessary to meet Reclamation’s future water quality and monitoring requirements.

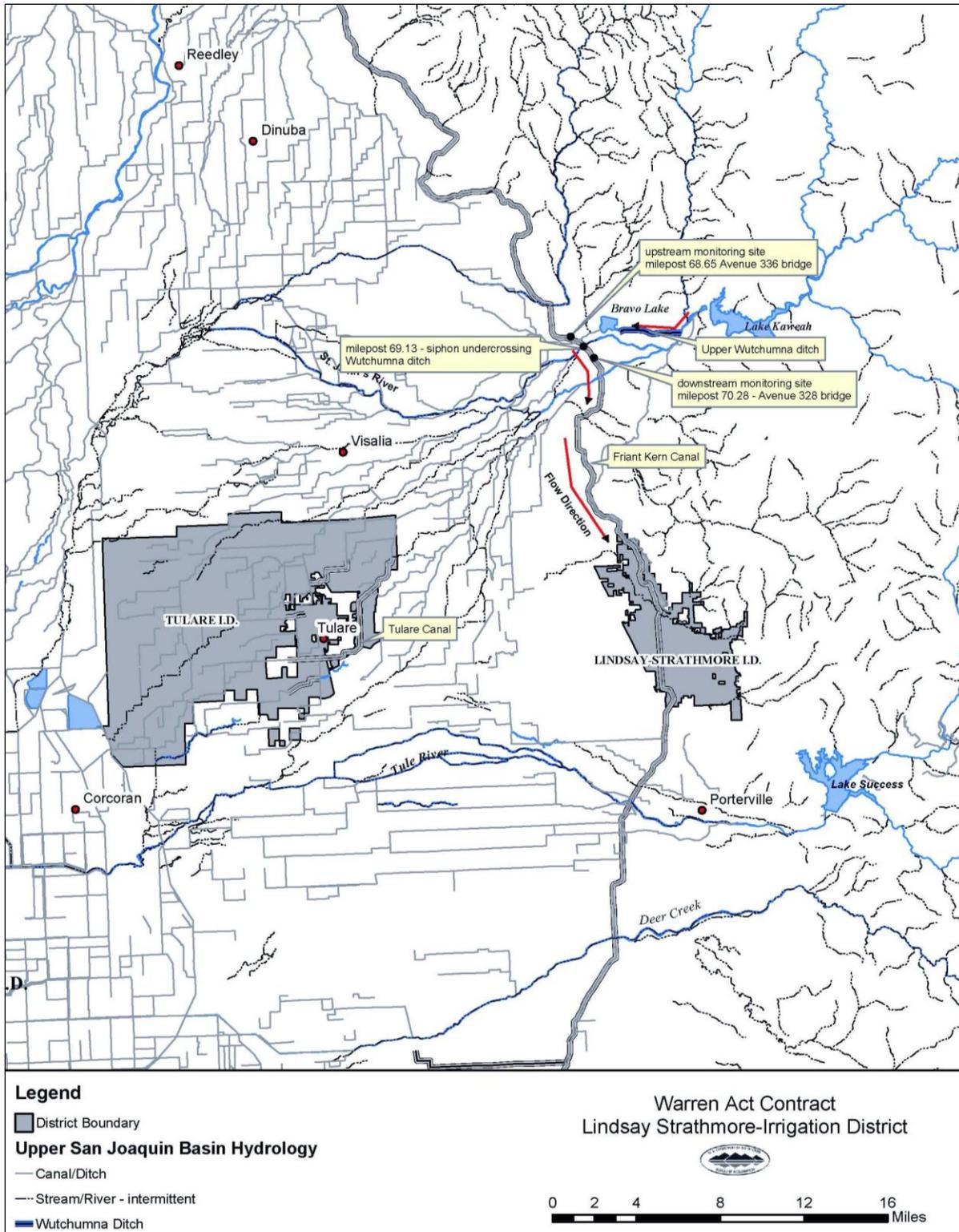


Figure 2-1 Proposed Course of Wutchumna Water to LSID via the FKC

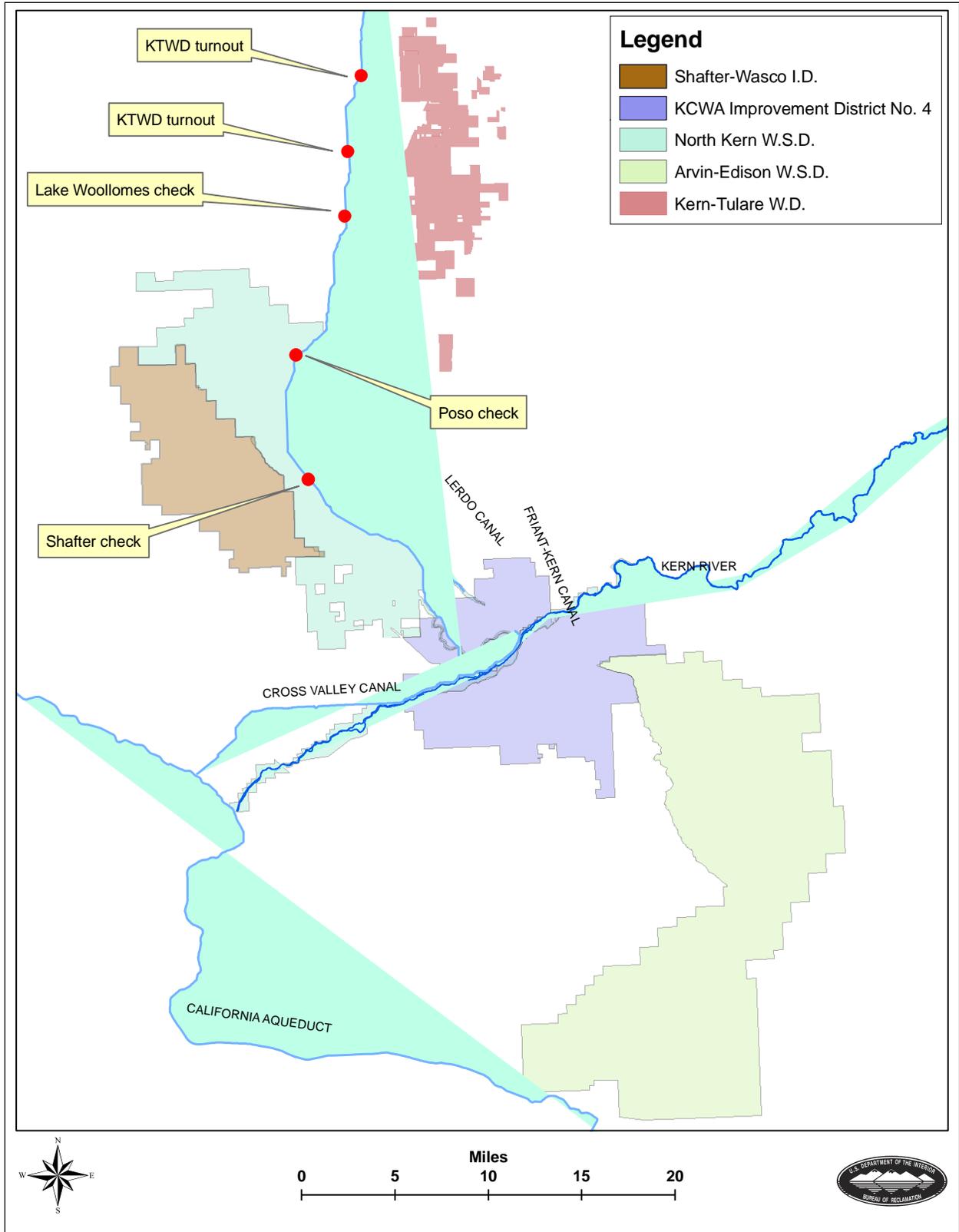


Figure 2-2 Proposed Conveyance Facilities and Possible Exchange Partners and Intermediaries for KTWD's non-CVP Water

## Section 3 Affected Environment and Environmental Consequences

This section identifies the potentially affected environment and the environmental consequences involved with the Proposed Action and the No Action Alternative, in addition to environmental trends and conditions that currently exist.

### 3.1 Affected Environment

#### 3.1.1 CVP Facilities

##### *Friant Dam*

Friant Dam is a concrete gravity dam completed in 1942, located in the Sierra Nevada foothills about 15 miles northeast of downtown Fresno. The dam impounds the upper San Joaquin River, which created Millerton Lake as a result. The lake has a capacity of 520,500 acre-feet (af) that is distributed through the FKC and Madera Canal for: irrigation; municipal & industrial (M&I) uses; fish & wildlife uses; and other uses. It is the last reservoir on the river used for flood control. The land surrounding Millerton Lake is undeveloped wilderness managed by the State of California Department of Parks and Recreation for day-use and overnight camping.

##### *Friant-Kern Canal*

The FKC carries water over 151.8 miles in a southerly direction from Millerton Lake to the Kern River, four miles west of Bakersfield. The FKC has an initial capacity of 5,000 cubic feet per second (cfs) that gradually decreases to 2,000 cfs at its terminus in the Kern River. The water conveyed in the FKC is from the San Joaquin River and is considered to be of good quality because it originates in the Sierra Nevada. The water is used for M&I and agricultural purposes in Fresno, Tulare, and Kern Counties.

#### 3.1.2 Lindsay-Strathmore Irrigation District

LSID is a repayment contractor formed in Tulare County in 1915, with a maximum annual entitlement of 27,500 af of Friant Division Class 1 water. Land use within LSID is mainly agricultural, consisting of roughly 15,700 acres of which 15,123 are currently irrigated. Most irrigable acres grow permanent crops; the main crops in LSID are oranges and olives. In addition, LSID also provides water to approximately 1,400 homes for M&I purposes.

When surface water is unavailable, LSID operates five groundwater wells. LSID does not overlie a reliable groundwater basin and in addition to surface water runoff flowing into areas down slope from the district, groundwater supplies are inadequate. LSID does not operate recharge areas or have a conjunctive use program. Instead, LSID contractually uses the conjunctive use capacity of Tulare Irrigation District (TID) by delivering a portion of its non-CVP supplies to TID for groundwater banking. Through an agreement with TID, this non-CVP water can then be made available to LSID during dry years.

LSID's source of non-CVP water derives from its ownership of 21 shares of Wutchumna Mutual Water Company (Wutchumna) stock from the Kaweah River, which historically has been

approximately 10,000 af. Approximately 1/3 of this Wutchumna water has been conveyed each year in the FKC to LSID (upon approval of a Warren Act contract), and the remaining 2/3 is delivered to other stockholders of Wutchumna, principally to TID, through private Wutchumna facilities. TID either uses this water for irrigation or direct sinking for recharge of their groundwater. TID returns surface water to LSID through either the FKC or through the Kaweah River system. In a dry year, less water can be delivered to TID for recharge purposes and more water could be conveyed in the FKC to LSID if capacity exists.

### **3.1.3 Kern-Tulare Water District**

KTWD is located east of the City of Delano in both Kern and Tulare Counties. KTWD has a CVP Cross Valley contract with Reclamation for up to 53,300 af of CVP water from the Sacramento-San Joaquin River Delta (Delta). Of the 23,434 acres located within KTWD, approximately 19,066 acres are currently irrigated and receive district water service. Land use within KTWD is mainly agricultural, consisting of permanent crops (primarily citrus, subtropical orchards, grapes and nuts). KTWD provides no domestic or residential water service.

To convey KTWD's CVP water supply from the Delta, water is wheeled through the California Aqueduct to Tupman under a contract with DWR. From Tupman, the water is conveyed east in the CVC. The CVP water is then directly delivered to KTWD and/or exchanged via arrangements under Article 5 with AEWSD or others. The CVP water can be introduced into the FKC either directly or through the CVC/FKC Intertie. AEWSD makes CVP water available to KTWD from the FKC. In order to physically deliver the CVP water to KTWD, it must be pumped over three structures in the FKC – similar to the methodology for conveyance of non-CVP water to KTWD as described in the Proposed Action.

In 1976, KTWD contracted with the City of Bakersfield for an average of 23,000 af of Kern River water. Delivery of this non-CVP water is facilitated by exchanges between the City of Bakersfield, KCWA ID#4, and AEWSD or another willing Friant Division Contractor. The non-CVP water under these agreements is delivered to KCWA ID#4 in exchange for SWP water, and then exchanged with a Friant Division Contractor for water made available to KTWD from the FKC. KTWD also has a contract with KCWA for purchase of SWP water, which has been made available from time to time. Water under this contract is exchanged with willing partners in similar to fashion to KTWD's source of Kern River water.

KTWD relies on approximately 12,000 af of groundwater annually, which is pumped by water users within its district from privately owned wells. The depth to groundwater varies from about 200 to over 600 feet. Wells drilled on the west side of KTWD tap into the continental deposits and wells drilled on the east side tap into highly permeable deposits of the Santa Margarita and/or the Olcese Formations. The continental deposits and the formations form an unconfined aquifer containing water that is classified as suitable for irrigation. Sources of groundwater replenishment include underflow to KTWD from both the east and the west.

## 3.2 Resources Eliminated from Further Analysis

Reclamation analyzed the affected environment and determined that neither Proposed Action nor the No Action Alternative have the potential to cause direct, indirect, or cumulative effects to the following resources:

**Table 3-1 Resources Eliminated from Further Analysis**

Resource	Reason Eliminated
Cultural Resources	Reclamation determined on December 4, 2012 that the Proposed Action has no potential to cause effects to historic properties pursuant to 36 CFR Part 800.3(a)(1). A copy of the determination is attached as Appendix B.
Indian Sacred Sites	The Proposed Action would not limit access to and ceremonial use of Indian sacred sites on Federal lands by Indian religious practitioners or adversely affect the physical integrity of such sacred sites, since there are no known Indian Sacred Sites on the land proposed for lease.
Indian Trusts Assets	Reclamation determined on December 3, 2012 that the Proposed Action would not impact ITA as there are none in the Proposed Action area. A copy of the determination is attached as Appendix C
Environmental Justice	No impact to minority or low-income populations would occur under the No Action Alternative, as conditions would remain the same as existing conditions. The Proposed Action does not propose any features that would result in adverse human health or environmental effects, have any physical effects on minority or low-income populations, and/or alter socioeconomic conditions of populations that reside or work near the Proposed Action.
Air Quality	No new facilities would be needed as a result of the Proposed Action that would cause emissions from construction activities. The pumps that would be used to convey the water under the Proposed Action are electric. These pumps would not emit pollutants at the pump; the source of the pollutants originates at the power plant. Power plants are permitted based on their maximum operating potential. The additional electricity would not result in the power plant exceeding operating capacity, and, thus, the applicable emissions permit.
Global Climate	Neither the Proposed Action nor the No Action alternative would involve physical changes to the environment or construction activities that could impact global climate change. Generating power plants that produce electricity to operate electric pumps produce carbon dioxide that could potentially contribute to GHG emissions; however, the Proposed Action is water that would be delivered from existing or new facilities under either alternative and is therefore part of the existing conditions.

## 3.3 Water Resources

### 3.3.1 Affected Environment

See Section 3.1.1 for a discussion of the affected water sources and Districts.

### 3.3.2 Environmental Consequences

#### ***No Action***

Under the No Action Alternative, Reclamation would continue to deliver CVP water in accordance with the terms and conditions of the Districts' CVP repayment and water service contracts. The existing Warren Act Contracts would remain in effect for their duration: allowing storage, conveyance, or diversion of up to 10,000 af/y of each District's non-CVP water when excess capacity exists, through February 28, 2014.

**Lindsay-Strathmore Irrigation District** Under the No Action Alternative, LSID would not be allowed to store or convey their Wutchumna water supply through the FKC. Without the Proposed Action, LSID could not use this Wutchumna water in its service area without constructing facilities to obtain this water. The construction of new facilities would duplicate a portion of the CVP facilities. Left in the Kaweah River, the Wutchumna water may not be directly available for use on LSID lands. LSID could sell the Wutchumna water to willing buyers and use the money to purchase local surface water supplies, if available. If surface water supplies are not available to purchase, then crop production within LSID could decrease.

LSID could also deliver the Wutchumna water to TID using non-CVP facilities for groundwater recharge, and could request water from TID's conjunctive use program via an exchange for CVP water from the FKC, when available. LSID has no usable groundwater basin that underlies the district, and does not operate recharge basins or a conjunctive use program. Groundwater pumping within the district would continue to be utilized if and when it is available, and has been historically inadequate and unreliable.

**Kern-Tulare Water District** Under the No Action Alternative, the non-CVP water would not be stored or conveyed in the FKC for direct delivery into KTWD's service area. Left in the Kern River, either the water could be sold to willing buyers, or KTWD could construct new facilities in order to use their Kern River water supplies on KTWD lands. Similarly, new facilities would be needed to physically deliver SWP water to KTWD. These new facilities would duplicate a portion of the FKC. Although the non-CVP water would not be conveyed to KTWD through CVP facilities, the Kern River and SWP water could continue to be exchanged with AEWS or other willing participants, at their discretion, for Friant CVP water when available. In addition, KTWD would continue to pump groundwater.

The No Action Alternative could therefore result in construction of new water conveyance facilities, and have the potential to increase groundwater withdrawals in an already overdrafted basin. There would be no effects to CVP facilities, operations, and water quality since non-CVP water would not be introduced into CVP facilities.

***Proposed Action***

The Proposed Action does not involve any construction activities or require any modifications to CVP facilities. The Proposed Action would not change any existing CVP water delivery diversion points. Since only excess capacity would be used, it would not interfere with normal CVP operations.

**Lindsay-Strathmore Irrigation District** Under the Proposed Action, Reclamation would store and convey Wutchumna water in the FKC for delivery into LSID's service area. This would not alter water rights held by the United States to divert CVP water from the San Joaquin River. LSID would continue to receive CVP water from the FKC according to the terms and conditions of their CVP repayment contract. The Proposed Action would not result in any construction activities or modifications to the FKC, and would not require any additional energy to convey the Wutchumna water. LSID would continue to use TID's conjunctive use program as well as pump groundwater within its district.

Through proactive testing and adaptive management, introduction of Wutchumna water into the FKC would not degrade the quality of CVP water. The CVP water and Wutchumna water originate from neighboring watersheds, so water quality would likely be similar. To verify water quality, the Wutchumna water would be tested prior to pumping into the FKC. The FKC would be tested upstream and downstream of the Wutchumna water's point of discharge. The constituents to be tested and frequency of testing would be as listed in Table 3-2. The tests would be compared against Reclamation's water quality standards (Appendix A): if Reclamation finds that the Wutchumna water quality is unsuitable, then Reclamation staff would work with LSID to modify the operations to improve water quality and/or restrict pumping until standards are met.

**Table 3-2 Water Quality Monitoring Requirements for LSID's Non-Project Water**

Location	FKC Milepost	Parameter	Frequency	Remarks
Friant-Kern Canal Avenue 336 bridge (upstream site)	68.65	Electrical conductivity, pH, turbidity	Monthly while Wutchumna water is being pumped into the canal	(2)
Wutchumna Ditch	69.13	Title 22 constituents, total coliform	Annual	(1)
		Electrical conductivity, pH, turbidity	Monthly	(2)
Friant-Kern Canal Avenue 328 bridge (downstream site)	70.28	Electrical conductivity, pH, turbidity	Monthly while Wutchumna water is being pumped into the canal	(2)

(1) Analyses must be conducted by a laboratory approved by Reclamation.

(2) Field measurements will be taken by the Non-Federal Operating Entity during the first week of each month and reported to the Contracting Officer by the 15<sup>th</sup> of each month.

**Kern-Tulare Water District** Under the Proposed Action, Reclamation would store and convey SWP and Kern River water supplies in the FKC for delivery into KTWD's service area. KTWD would continue to receive CVP water according to the terms and conditions of their Cross Valley contract via direct delivery in the FKC and/or exchanges with a partner. No construction or modifications to the FKC would be required as a result of storing and conveying this water over the checks. Some additional energy may be necessary to convey the SWP and Kern River water supplies. KTWD would also continue to use and pump groundwater within its service area.

Through proactive testing and adaptive management, introduction of the SWP and Kern River water into the FKC would not degrade the quality of CVP water. KTWD's non-CVP water would be tested at specific entry points and locations along the FKC, and at routine time intervals as shown in Table 3-3. If the quality of the SWP and/or Kern River water is unsuitable, Reclamation staff would work with KTWD to modify the operations to improve water quality and/or restrict pumping until Reclamation's standards are met.

**Table 3-3 Water Quality Monitoring Requirements for KTWD's Non-Project Water**

Location	FKC Milepost	Parameter	Frequency	Responsible Agency	Remarks
San Joaquin River below Friant Dam or Friant-Kern Canal headworks	0.0	Title 22 constituents, Bacteria	Quarterly	Reclamation	(1), (2), (3), (5)
Farm Bridge	132.45	Field Measurements	Weekly	Non-Federal Operating Entity	(4), (5)
Discharge from North Kern Water Storage District's Beardsley Canal	133.42	Title 22 constituents, Bacteria	Annually, if introduction from this source is anticipated	Kern-Tulare WD	(2), (3), (5)
Kimberlina Ave Bridge	134.44	Field Measurements	Weekly	Non-Federal Operating Entity	(4), (5)
Intertie from CVC	152.10	Title 22 constituents, Bacteria	Quarterly	Reclamation	(1), (2), (3), (5)

- (1) Part of Reclamation's Baseline Monitoring Program
- (2) Bacteria include: Cryptosporidium, Giardia, Fecal Coliform, Total Coliform
- (3) Analyses must be conducted by a laboratory approved by Reclamation.
- (4) Field measurements will be taken during each week that non-Project water is being pumped into the FKC.
- (5) Copies of all laboratory results and field measurements must be submitted to Reclamation.

### ***Cumulative Impacts***

Reclamation and the Friant Water Authority routinely monitor water quality in the FKC, and the Proposed Action would not cumulatively impact the FKC. As outlined above, Reclamation would require the non-CVP water introduced into the FKC to meet established water quality standards. If water degradation due to one or more of the pump-ins occurs, the responsible pump-ins would be terminated, and would have to reestablish acceptable quality standards before allowed to operate again.

## **3.4 Land Use**

### **3.4.1 Environmental Consequences**

#### ***No Action***

Without Reclamation's approval of the Proposed Action, the Districts would not be able to store or convey their non-CVP water in Federal facilities. The Districts would still receive CVP water to be used on existing agricultural lands and for M&I uses, as described in their respective water service contracts.

Hydrological cycles impact available water supplies. During dry years and without Warren Act contracts, landowners in the Districts may be forced to pump groundwater or to fallow and/or retire established permanent crops. Since both of the Districts contain prime farmland, unique farmland, farmland of statewide importance, and farmland of local importance, the No Action Alternative has the potential to adversely impact these resources.

### **Proposed Action**

Under the Proposed Action, Reclamation would approve the Warren Act contracts and allow the districts to store and/or convey their non-CVP water in Friant Division facilities when capacity exists. The Proposed Action would not involve any new construction activities or modifications to existing facilities. The Proposed Action would not increase or decrease water supplies that would result in additional homes to be constructed or served in the respective districts. In addition, untilled lands or lands that have been fallowed for three or more years would not be put into production as a result of the Proposed Action.

The storage and conveyance of this non-CVP water would not have any adverse effects on unique geological or terrain features such as wetlands, wild or scenic rivers, refuges, flood plains, or rivers placed on the nationwide inventory. Compared to the No Action Alternative, the Proposed Action may benefit prime and unique farmlands.

### **Cumulative Impacts**

Current trends in the San Joaquin Valley indicate increased population growth over the next 20 years. It is likely that changes of water usage would occur including requests for changes in water district boundaries, permanent changes of agricultural water to M&I use, contract assignments, changes in land uses, and permanent water transfers. Reclamation does not have authority over water use changes or changes in water district boundaries; however, Reclamation is notified to determine whether these changes would impact repayment under the terms and conditions of the water service contracts in addition to compliance with applicable laws including but not limited to laws designed to protect the human environment. It is reasonable and foreseeable that agricultural lands would be sold to developers as land becomes more valuable. Each change in land use must undergo environmental review and approvals by the appropriate approving agencies including city and county officials, as well as the Local Area Formation Committee. Once approved, requests for changes in how, where, and when water is applied could occur. These requests for changes are the result of economic pressure and not the result of conveyance or deliveries of federal or non-federal water.

## **3.5 Biological Resources**

### **3.5.1 Affected Environment**

A species list for Kern and Tulare Counties was obtained from [http://www.fws.gov/sacramento/es\\_species/Lists/es\\_species\\_lists-form.cfm](http://www.fws.gov/sacramento/es_species/Lists/es_species_lists-form.cfm) on January 14, 2014 (document number 140114121108). Table 3-4 lists these species and critical habitat and summarizes their potential for occurrence/effects determinations. The table is also based on data in the California Natural Diversity Database (DFW 2014) and other information in Reclamation's files.

**Table 3-4 Special Status Species Potentially Occurring with the Proposed Action Area**

<u>Species</u>	<u>Status<sup>1</sup></u>	<u>Effects<sup>2</sup></u>	<u>Occurrence in the Proposed Action Area<sup>3</sup></u>
<b>Amphibians</b>			
California red-legged frog ( <i>Rana draytonii</i> )	T	NE	<b>Absent.</b> No longer occurs on valley floor.
California tiger salamander ( <i>Ambystoma californiense</i> )	T, X	NE	<b>Absent.</b> Does not occur in farmlands, lands developed to M&I use (KCWA Improvement District

<u>Species</u>	<u>Status</u> <sup>1</sup>	<u>Effects</u> <sup>2</sup>	<u>Occurrence in the Proposed Action Area</u> <sup>3</sup>
			#4), or conveyance facilities.
mountain yellow-legged frog ( <i>Rana muscosa</i> )	PE, PX	NE	<b>Absent.</b> Proposed Action is outside the species' range.
Sierra Nevada yellow-legged frog ( <i>Rana sierrae</i> )	PE, PX	NE	<b>Absent.</b> Proposed Action is outside the species' range.
Yosemite toad ( <i>Bufo canorus</i> )	PT, PX	NE	<b>Absent.</b> Proposed Action is outside the species' range.
<b>Birds</b>			
California condor ( <i>Gymnogyps californianus</i> )	E, X	NE	<b>Absent.</b> Not expected to use farm fields on the valley floor.
Least Bell's vireo ( <i>Vireo bellii pusillus</i> )	E	NE	<b>Absent.</b> Suitable riparian habitat with a well-developed understory is lacking.
southwestern willow flycatcher ( <i>Empidonax traillii extimus</i> )	E	NE	<b>Absent.</b> Suitable riparian habitat is lacking.
western snowy plover ( <i>Charadrius alexandrinus nivosus</i> )	T	NE	<b>Absent.</b> In Tulare County, snowy plovers are known to use evaporation basins, which are not part of the Proposed Action Area.
western yellow-billed cuckoo ( <i>Coccyzus americanus occidentalis</i> )	PT	NE	<b>Absent.</b> Extensive cottonwood-willow riparian forest no longer occurs in San Joaquin Valley..
<b>Fish</b>			
Central Valley Spring-run Chinook Salmon ( <i>Oncorhynchus tshawytscha</i> )	T, X	NE	<b>Absent.</b> Proposed Action is outside the species' range.
Central Valley steelhead ( <i>Oncorhynchus mykiss</i> )	T, X	NE	<b>Absent.</b> Proposed Action is outside the species' range.
delta smelt ( <i>Hypomesus transpacificus</i> )	T	NE	<b>Absent.</b> Proposed Action is outside the species' range.
Little Kern golden trout ( <i>Oncorhynchus aquabonita whitei</i> )	T, X	NE	<b>Absent.</b> Proposed Action is outside the species' range.
North American green sturgeon ( <i>Acipenser medirostris</i> )	T, X	NE	<b>Absent.</b> Proposed Action is outside the species' range.
Owens tui chub ( <i>Gila bicolor snyderi</i> )	E	NE	<b>Absent.</b> Proposed Action is outside the species' range.
Sacramento River Winter-run Chinook Salmon ( <i>Oncorhynchus tshawytscha</i> )	E, X	NE	<b>Absent.</b> Proposed Action is outside the species' range.
<b>Invertebrates</b>			
Conservancy fairy shrimp ( <i>Branchinecta conservatio</i> )	E	NE	<b>Absent.</b> Does not occur in farmlands, lands developed to M&I use (KCWA Improvement District #4), or conveyance facilities.
Kern primrose sphinx moth ( <i>Euproserpinus euterpe</i> )	T	NE	<b>Absent.</b> Proposed Action is outside the species' range.
longhorn fairy shrimp ( <i>Branchinecta longiantenna</i> )	E,X	NE	<b>Absent.</b> Does not occur in farmlands, lands developed to M&I use (KCWA Improvement District #4), or conveyance facilities.
valley elderberry longhorn beetle ( <i>Desmocerus californicus dimorphus</i> )	T	NE	<b>Possible.</b> Does not occur in farmlands, lands developed to M&I use (KCWA Improvement District #4). Could occur along some conveyance facilities, but no construction would occur as part of the Proposed Action.
vernal pool fairy shrimp ( <i>Branchinecta lynchi</i> )	T, X	NE	<b>Absent.</b> Does not occur in farmlands, lands developed to M&I use (KCWA Improvement District #4), or conveyance facilities.
vernal pool tadpole shrimp ( <i>Lepidurus packardii</i> )	E, X	NE	<b>Absent.</b> Does not occur in farmlands, lands developed to M&I use (KCWA Improvement District #4), or conveyance facilities.
<b>Mammals</b>			

<b><u>Species</u></b>	<b><u>Status</u><sup>1</sup></b>	<b><u>Effects</u><sup>2</sup></b>	<b><u>Occurrence in the Proposed Action Area</u><sup>3</sup></b>
Buena Vista Lake shrew ( <i>Sorex ornatus relictus</i> )	E, X	NE	<b>Possible.</b> There is a record in part of the Proposed Action Area (KCWA Improvement District #4), but no land use change would occur as part of the Proposed Action.
fisher ( <i>Martes pennanti</i> )	C	NE	<b>Absent.</b> Proposed Action is outside the species' range.
Fresno kangaroo rat ( <i>Dipodomys nitratoides exilis</i> )	E, X	NE	<b>Absent.</b> Proposed Action is outside the species' range.
giant kangaroo rat ( <i>Dipodomys ingens</i> )	E	NE	<b>Absent.</b> Proposed Action is outside the species' range.
San Joaquin kit fox ( <i>Vulpes macrotis mutica</i> )	E	NE	<b>Possible.</b> The foxes can use agricultural lands for foraging, but they must have other habitat nearby that they can use for denning (Warrick et al. 2007). The Proposed Action would not do anything to affect agricultural lands as potential kit fox foraging habitat.
Sierra Nevada bighorn sheep ( <i>Ovis canadensis californiana</i> )	E	NE	<b>Absent.</b> Proposed Action is outside the species' range.
Tipton kangaroo rat ( <i>Dipodomys nitratoides nitratoides</i> )	E	NE	<b>Absent.</b> Does not occur in farmlands, lands developed to M&I use (KCWA Improvement District #4), or conveyance facilities.
<b>Plants</b>			
Bakersfield cactus ( <i>Opuntia treleasei</i> )	E	NE	<b>Absent.</b> Does not occur in farmlands, lands developed to M&I use (KCWA Improvement District #4), or conveyance facilities.
California jewelflower ( <i>Caulanthus californicus</i> )	E	NE	<b>Absent.</b> Does not occur in farmlands, lands developed to M&I use (KCWA Improvement District #4), or conveyance facilities.
Greene's tuctoria ( <i>Tuctoria greenei</i> )	E	NE	<b>Absent.</b> Does not occur in farmlands, lands developed to M&I use (KCWA Improvement District #4), or conveyance facilities.
Hoover's spurge ( <i>Chamaesyce hooveri</i> )	T, X	NE	<b>Absent.</b> Does not occur in farmlands, lands developed to M&I use (KCWA Improvement District #4), or conveyance facilities.
Keck's checker-mallow ( <i>Sidalcea keckii</i> )	E, X	NE	<b>Absent.</b> Does not occur in farmlands, lands developed to M&I use (KCWA Improvement District #4), or conveyance facilities.
Kern mallow ( <i>Eremalche kernensis</i> )	E	NE	<b>Absent.</b> Does not occur in farmlands, lands developed to M&I use (KCWA Improvement District #4), or conveyance facilities.
Ramshaw sand-verbena ( <i>Abronia alpina</i> )	C	NE	<b>Absent.</b> Proposed Action is outside the species' range.
San Joaquin adobe sunburst ( <i>Pseudobahia peirsonii</i> )	T	NE	<b>Absent.</b> Does not occur in farmlands, lands developed to M&I use (KCWA Improvement District #4), or conveyance facilities.
San Joaquin Valley Orcutt grass ( <i>Orcuttia inaequalis</i> )	T, X	NE	<b>Absent.</b> Does not occur in farmlands, lands developed to M&I use (KCWA Improvement District #4), or conveyance facilities.
San Joaquin woolly-threads ( <i>Monolopia congdonii</i> )	E	NE	<b>Absent.</b> Does not occur in farmlands, lands developed to M&I use (KCWA Improvement District #4), or conveyance facilities.
Springville clarkia ( <i>Clarkia springvillensis</i> )	T	NE	<b>Absent.</b> Proposed Action is outside the species' range.
<b>Reptiles</b>			
Blunt-nosed leopard lizard ( <i>Gambelia sila</i> )	E	NE	<b>Absent.</b> Does not occur in farmlands, lands developed to M&I use (KCWA Improvement District #4), or conveyance facilities.
Giant garter snake ( <i>Thamnophis gigas</i> )	T	NE	<b>Absent.</b> The species no longer occurs in this part of the valley, and no land use change or

<u>Species</u>	<u>Status<sup>1</sup></u>	<u>Effects<sup>2</sup></u>	<u>Occurrence in the Proposed Action Area<sup>3</sup></u>
			construction would occur as part of the Proposed Action.
<sup>1</sup> Status= Status of federally protected species protected under federal Endangered Species Act. E: Listed as Endangered under the federal Endangered Species Act. NFMS: Species under the Jurisdiction of the National Oceanic & Atmospheric Administration Fisheries Service. T: Listed as Threatened under the federal Endangered Species Act. X: Critical habitat designated under the federal Endangered Species Act. C: Candidate to become a proposed species. <sup>2</sup> Effects = Endangered Species Act Effect determination NE: No Effect anticipated from the Proposed Action to federally listed species <sup>3</sup> Definition Of Occurrence Indicators Present: Species observed in the area. Absent: Species not recorded in study area and/or habitat requirements not met <sup>4</sup> CNDDDB = California Natural Diversity Database 2012			

### 3.5.2 Environmental Consequences

#### **No Action**

Under the No Action Alternative, ongoing farming activities and various maintenance activities (such as for canals) might continue to affect the Buena Vista Lake shrew, San Joaquin kit fox, and valley elderberry longhorn beetle. The other species have been eliminated from the area due to past agricultural and M&I development.

#### **Proposed Action**

As a result of the restrictions placed on the Proposed Action by the environmental commitments, the few species at issue that may occur in the Proposed Action Area would not be affected, due to the lack of land use change, construction, or changes in waterways.

#### **Cumulative Impacts**

As the Proposed Action would not result in any direct or indirect impacts on these biological resources, it would not contribute cumulatively to any such impacts.

## 3.6 Socioeconomic Resources

### 3.6.1 Affected Environment

The agricultural industry significantly contributes to the overall economic stability of the San Joaquin Valley. The CVP allocations allow farmers to plan for the types of crops to grow and to secure loans to purchase supplies. The economic variances may include fluctuating agricultural prices, insect infestation, changing hydrologic conditions, increased fuel and power costs.

### 3.6.2 Environmental Consequences

#### **No Action**

Under the No Action Alternative, Reclamation would not approve Warren Act contracts to convey and store non-CVP water in CVP facilities. Use of alternative supplies such as groundwater or alternative contracts could increase costs to the districts or individual farms. Demand for local labor and farm supplies would be reduced. Under the No Action Alternative,

there could be temporary adverse impacts to socioeconomic resources due to potential fallowing of farmland. However, this could change with the hydrological conditions.

***Proposed Action***

Under the Proposed Action, participating districts could convey and store non-CVP water in CVP facilities to supplement their CVP water supply. The Warren Act contracts and exchange agreements would allow the non-CVP water to be distributed to sustain permanent crops. This could help maintain the local agricultural economy.

***Cumulative Impacts***

There would be no adverse cumulative impacts to socioeconomic resources as a result of the Proposed Action. The Proposed Action could result in a stronger local agricultural economy during the contracts' timeframe.

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## **Section 4 Consultation and Coordination**

### **4.1 Public Review Period**

Reclamation intends to provide the public with an opportunity to comment on the Draft Finding of No Significant Impact and Draft EA between January 22, 2014 and February 21, 2014.

### **4.2 Fish and Wildlife Coordination Act (16 U.S.C. § 661 et seq.)**

The Fish and Wildlife Coordination Act (FWCA) requires that Reclamation consult with fish and wildlife agencies (federal and state) on all water development projects that could affect biological resources. The amendments enacted in 1946 require consultation with the Service and State fish and wildlife agencies “whenever the waters of any stream or other body of water are proposed or authorized to be impounded, diverted, the channel deepened, or the stream or other body of water otherwise controlled or modified for any purpose whatever, including navigation and drainage, by any department or agency of the United States, or by any public or private agency under Federal permit or license”. Consultation is to be undertaken for the purpose of “preventing the loss of and damage to wildlife resources”.

The Proposed Action does not involve any new impoundment or diversion of waters, channel deepening, or other control or modification of a stream or body of water as described in the statute, but the exchange of pumped groundwater for CVP water. In addition, no construction or modification of water conveyance facilities are required for movement of this water. Consequently, Reclamation has determined that FWCA does not apply.

### **4.3 Endangered Species Act (16 U.S.C. § 1531 et seq.)**

Section 7 of the Endangered Species Act requires Federal agencies, in consultation with the Secretary of the Interior and/or Commerce, to ensure that their actions do not jeopardize the continued existence of endangered or threatened species, or result in the destruction or adverse modification of the critical habitat of these species.

Reclamation has determined that the Proposed Action would not affect any Federally listed or proposed species or critical habitat. Therefore, no consultation is needed. The U.S. Fish and Wildlife Service (USFWS) will be sent a copy of the EA and FONSI when they are released for public review.

### **4.4 Migratory Bird Treaty Act (16 U.S.C. § 703 et seq.)**

The MBTA implements various treaties and conventions between the United States and Canada, Japan, Mexico and the former Soviet Union for the protection of migratory birds. Unless permitted by regulations, the Act provides that it is unlawful to pursue, hunt, take, capture or kill; attempt to take, capture or kill; possess, offer to or sell, barter, purchase, deliver or cause to be

shipped, exported, imported, transported, carried or received any migratory bird, part, nest, egg or product, manufactured or not. Subject to limitations in the Act, the Secretary of the Interior may adopt regulations determining the extent to which, if at all, hunting, taking, capturing, killing, possessing, selling, purchasing, shipping, transporting or exporting of any migratory bird, part, nest or egg will be allowed, having regard for temperature zones, distribution, abundance, economic value, breeding habits and migratory flight patterns.

Reclamation has determined that the Proposed Action would not affect migratory birds. Therefore, no consultation is needed. The USFWS will be sent a copy of the EA and FONSI when they are released for public review.

#### **4.5 Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. § 1801 et seq.)**

The Magnuson-Stevens Fishery Conservation and Management is the primary law governing marine fisheries management in United States federal waters. The Act was first enacted in 1976 and amended in 1996.

No natural waterways and therefore no Essential Fish Habitat would be affected by the Proposed Action. Therefore, no consultation is required.

## Section 5 Preparers and Reviewers

Nicholas Kilb, Natural Resources Specialist, SCCAO  
 Ben Lawrence, Natural Resources Specialist, SCCAO  
 Rain Emerson, Natural Resources Specialist, SCCAO- Reviewer  
 Shauna McDonald, Wildlife Biologist, SCCAO  
 William E. Soule, M.A., Archaeologist, MP-153  
 Patricia Rivera, Native American Affairs Specialist, MP-400 – Indian Trust Assets  
 Michael C. S. Eacock, Natural Resources Specialist, SCCAO  
 Randy English, Supervisory Natural Resources Specialist, SCCAO – Reviewer

## Section 6 Acronyms and Abbreviations

AEWSD	Arvin-Edison Water Storage District
af	acre-feet
cfs	cubic feet per second
CNDDDB	California Natural Diversity Database
CVP	Central Valley Project
CVC	Cross-Valley Canal
Delta	Sacramento-San Joaquin River Delta
DFW	California Department of Fish and Wildlife
EA	Environmental Assessment
FKC	Friant-Kern Canal
FONSI	Finding of No Significant Impact
ID#4	Irrigation District #4
LSID	Lindsay-Strathmore Irrigation District
KCWA	Kern County Water Agency
KTWD	Kern-Tulare Water District
M&I	Municipal and Industrial
PEIS	Programmatic Environmental Impact Statement
Reclamation	United States Bureau of Reclamation
ROD	Record of Decision
SWP	State Water Project
TID	Tulare Irrigation District
USFWS	US Fish and Wildlife Service

## **Section 7 References**

California Department of Fish and Wildlife (DFW). 2014. California Natural Diversity Database (CNDDB), Government Version.

U.S. Fish and Wildlife Service (USFWS). 2012. Species List

Warrick, G. D., H. O. Clark, Ir., P. A. Kelly, D. F. Williams, and B. L. Cypher . 2007. Use of agricultural lands by San Joaquin kit foxes. *Western North American Naturalist* 67:270- 277.

# **Appendix A Policy for Accepting Non-Project Water into the Friant-Kern and Madera Canals: Water Quality Monitoring Requirements**

# **Appendix B Cultural Resources Determination**

**From:** [Soule, William E](#)  
**To:** [Kilb, Nicholas D](#)  
**Cc:** [BOR MPR Cultural Resources Section](#)  
**Subject:** RE: Request for Determinations, EA-12-069 Storage and Conveyance of Non-Project Water for Kern-Tulare Water District and Lindsay-Strathmore Irrigation District  
**Date:** Tuesday, December 04, 2012 8:23:09 AM  
**Attachments:** [image001.png](#)  
[image002.png](#)

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Nick:

Re: 13-SCAO-041: Storage and Conveyance of Non-Project Water for Kern-Tulare Water District (KTWD) and Lindsay-Strathmore Irrigation District (LSID).

The proposed undertaking is the approval by Reclamation of requests by KTWD and LSID to each store, convey, divert, and exchange 30,000 acre-feet of water per year of non-CVP water in Friant and Cross-Valley Division facilities. This is the type of action that does not have the potential to cause effects on historic properties assuming that historic properties were present, pursuant to 36 CFR Part 800.3(a)(1).

The proposed undertaking is the replacement of existing 5-year Warren Act contracts for 10,000 acre-feet per year from 2009-2014 with new contracts for 30,000 acre-feet each (KTWD and LSID) per year. The Warren Act authorizes Reclamation to enter into contracts to impound, store, and convey non-CVP water when excess capacity is available in federal facilities. Reclamation will also approve the exchange of non-CVP water for CVP water in order to facilitate delivery. The approvals would be for varying lengths of time between the 2013 and 2042 Contract Years (March 1, 2013 - February 28, 2042).

There will be no land use change, new infrastructure, modification of existing infrastructure, or ground disturbing activities required for this action. This email is intended to convey the completion of the Section 106 process for this undertaking. Accordingly, I concur with the inclusion of a statement in Section 3.4 of EA-12-069 that this action has no potential to cause effects to historic properties pursuant to 36 CFR Part 800.3(a)(1). Thank you for providing the opportunity to comment on this action.

Sincerely,

Bill

William E. Soule, M.A., Archaeologist  
U.S. Bureau of Reclamation, Mid-Pacific Region  
2800 Cottage Way, MP-153  
Sacramento, CA 95825  
Phone: 916-978-4694  
Email: [wsoule@usbr.gov](mailto:wsoule@usbr.gov)

---

**From:** Kilb, Nicholas D  
**Sent:** Monday, December 03, 2012 1:56 PM

**To:** BOR MPR Cultural Resources Section

**Subject:** Request for Determinations, EA-12-069 Storage and Conveyance of Non-Project Water for Kern-Tulare Water District and Lindsay-Strathmore Irrigation District

The subject line of my last email was incorrect. It should have been for EA-12-069 Storage and Conveyance of Non-Project Water for Kern-Tulare Water District and Lindsay-Strathmore Irrigation District.

Thanks,  
Nick Kilb

---

**From:** Kilb, Nicholas D

**Sent:** Monday, December 03, 2012 1:37 PM

**To:** BOR MPR Cultural Resources Section; Rivera, Patricia L; Robbins, Eleanor J (Ellie); Williams, Mary D (Diane)

**Subject:** RE: Request for Determinations, CEC-12-083 Soil Vapor Testing for VOCs in Contra Costa Canal Access Road

Hi all,

Attached is a request for determinations. I've also attached a (rough) draft EA, with a project description and maps. If you have any questions or concerns, please feel free to contact me.

- Request Date: December 3, 2012
- Requesting Office: SCCAO
- Requestor: Nick Kilb
- Project Name: Storage and Conveyance of Non-Project Water for Kern-Tulare Water District and Lindsay-Strathmore Irrigation District
- Target Date for Completion: January 15, 2013
- Cost Authority: A1R-1752-9652-220-00-2-5
- Reclamation Point(s) of Contact: Nick Kilb
- Project Description/Reclamation's Role: see attached.
- Other Agencies Involved: Lindsay-Strathmore Irrigation District, Kern-Tulare Water District
- Level of NEPA Anticipated: EA
- Project Location: Lindsay-Strathmore Irrigation District, Kern-Tulare Water District, Friant-Kern Canal south of MP 68.65, Cross-Valley Canal – see attached EA for maps.
  
- Supplemental Information: See attached Admin Draft EA.

Thank You,  
Nicholas (Nick) Kilb  
Natural Resources Specialist, NEPA Team  
Bureau of Reclamation

South-Central California Area Office  
1243 "N" Street  
Fresno, CA 93721-1813  
559-487-5044  
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**RECLAMATION**  
*Managing Water in the West*



Save a tree.  
Please don't print this e-mail unless it's necessary.

# **Appendix C Indian Trust Assets Determination**

**From:** [Rivera, Patricia L](#)  
**To:** [Kilb, Nicholas D](#)  
**Cc:** [Robbins, Eleanor J \(Ellie\)](#)  
**Subject:** RE: Request for Determinations, CEC-12-083 Soil Vapor Testing for VOCs in Contra Costa Canal Access Road--  
Ellie this is admin  
**Date:** Monday, December 03, 2012 1:52:44 PM  
**Attachments:** [image003.png](#)

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Nick,

I reviewed the proposed action to approve storage, conveyance, and/or diversion of non-CVP water in Federal facilities when excess capacity exists, according to Article 18 of the Districts' repayment contracts. Reclamation would also approve exchange of the Districts' non-CVP water for CVP water, in order to facilitate delivery. Approvals would be for varying lengths of time between the 2013 through 2042 Contract Years (March 1, 2013 - February 28, 2043).

#### [Lindsay-Strathmore Irrigation District](#)

Reclamation proposes to approve storage, conveyance, and/or diversion of LSID's non-CVP water in Federal facilities when excess capacity exists, according to Article 18 of LSID's Friant Division repayment contract. LSID's non-CVP water originates in the Kaweah River, passes through Bravo Lake, and enters the Upper Wutchumna Ditch. The water would be pumped from the Wutchumna Ditch into the FKC, and ultimately into LSID's distribution system and service area. Any amount of Wutchumna water left in storage in the FKC would be allowed to "float" for the duration of the approval, when Reclamation determines that excess capacity exists. Water quality requirements would need to be satisfied and maintained for as long as the Wutchumna water is stored and conveyed in the FKC. LSID would then be able to withdraw any remaining stored Wutchumna water from the FKC as needed.

#### [Kern-Tulare Water District](#)

Reclamation proposes to approve storage, conveyance, and/or diversion of KTWD's non-CVP water in Federal facilities when excess capacity exists, per the terms of KTWD's partial assignment of the Southern San Joaquin Municipal Utility District Friant Division repayment contract. KTWD's non-CVP supplies include Kern River and State Water Project (SWP) supplies. These two sources of non-CVP water would be introduced into the FKC from: the CVC through existing siphons; the CVC through the CVC/FKC Intertie; or the Lerdo Canal via North Kern Water Storage District's existing lateral. Once introduced into the FKC, the non-CVP water could be stored, delivered directly to KTWD's service area, or delivered to KTWD through an intercept exchange for CVP water from the FKC. Any amount of KTWD's non-CVP water left in storage in the FKC would be allowed to "float" for the duration of the approval, when Reclamation determines that excess capacity exists. Water quality requirements would need to be satisfied and maintained for as long as the non-CVP water is stored and conveyed in the FKC. KTWD would then be able to withdraw any of their remaining stored non-CVP water from the FKC as needed. To physically deliver the water all the way to KTWD would require pumping over three check structures: the Shafter Check, the Poso Creek Check, and the Lake Woollomes Check. Alternatively, an intercept exchange can usually be made with Arvin-Edison Water Storage District (AEWSD) which requires no additional lifts. When an intercept exchange with AEWSD is not available, it may also be possible to pump the water over just one check (Shafter Check), and then exchange with Shafter-Wasco Irrigation District (SWID). Possible

intermediaries needed to facilitate these exchanges may include the North Kern Water Storage District and Kern County Water Agency Improvement District No. 4 .

The proposed action does not have a potential to affect Indian Trust Assets.

Patricia Rivera  
Native American Affairs Program Manager  
Bureau of Reclamation  
Mid-Pacific Region  
Sacramento, California 95825  
(916) 978-5194 (Office)  
(916) 978-5290 (Fax)

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**RECLAMATION**  
*Managing Water in the West*